DIRECT TESTIMONY

OF

JEROME D. MIERZWA

ON BEHALF

OF

SOUTH CAROLINA DEPARTMENT OF CONSUMER AFFAIRS

DOCKET NO. 2019-290-WS

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I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Jerome D. Mierzwa. I am a principal and President of Exeter Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-related consulting services.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I graduated from Canisius College in Buffalo, New York, in 1981 with a Bachelor of Science Degree in Marketing. In 1985, I received a Master's Degree in Business Administration with a concentration in finance, also from Canisius College. In July 1986, I joined National Fuel Gas Distribution Corporation ("NFG Distribution") as a Management Trainee in the Research and Statistical Services Department ("RSS"). I was promoted to Supervisor RSS in January 1987. While employed with NFG Distribution, I conducted various financial and statistical analyses related to the Company's market research activity and state regulatory affairs. In April 1987, as part of a corporate reorganization, I was transferred to National Fuel Gas Supply Corporation's ("NFG Supply") rate department where my responsibilities included utility cost of service and rate design analysis, expense and revenue requirement forecasting and activities related to federal regulation. I was also responsible for preparing NFG Supply's Purchase Gas Adjustment ("PGA") filings and developing interstate pipeline and spot market supply gas price projections. These forecasts were utilized for internal planning purposes as well as in NFG Distribution's state purchased gas cost proceedings.

In April 1990, I accepted a position as a Utility Analyst with Exeter Associates, Inc. ("Exeter"). In December 1992, I was promoted to Senior Regulatory Analyst. Effective April 1, 1996, I became a principal of Exeter. Since joining Exeter, my assignments have included water and gas utility class cost of service and rate design analysis, evaluating the gas purchasing practices and policies of natural gas utilities, sales and rate forecasting, performance-based incentive regulation, revenue requirement analysis, the unbundling of utility services, and the evaluation of customer choice natural gas transportation programs.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION, OR OTHER STATE COMMISSIONS? IF SO, WHICH COMMISSIONS?

A. I have provided testimony on more than 350 occasions in proceedings before the Federal Energy Regulatory Commission ("FERC"), utility regulatory commissions in Arkansas, Delaware, Georgia, Illinois, Indiana, Louisiana, Maine, Montana, Nevada, New Jersey, Ohio, Pennsylvania, Rhode Island, Texas, Utah, and Virginia.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No, I have not.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. On October 2, 2019, Blue Granite Water Company ("BGWC" or "Company") filed an Application with the Public Service Commission of South Carolina, ("Commission") to increase charges for water service by $5.576 million, or 47 percent, and charges for sewer service by $6.156 million, or 56 percent. Exeter was retained by the South Carolina Department of Consumer Affairs ("Department") to assist in the review and evaluation of BGWC's Application. My testimony addresses cost allocation and design. My

colleague, Mr. Lafayette K. Morgan, addresses the reasonableness of the water and sewer service revenue increases requested by BGWC.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND FINDINGS.

A. With respect to cost allocation and rate design, I found and recommend that:

- BGWC's existing base facility (monthly customer) charges for water service should remain unchanged, and that any increase in revenue authorized by this Commission in this proceeding should be recovered through increases in the volumetric usage (commodity and distribution) charges;
- In its Rebuttal Testimony, BGWC should address whether it would be reasonable to assess volumetric charges for sewer service based on customer water service usage; and
- In its Rebuttal Testimony, BGWC should address whether its current system of assessing Commercial customers sewer service charges based on each customer's Single-Family Equivalent ("SFE") is reasonable.

The Department has submitted discovery to BGWC concerning the sewer service-related findings and recommendations; however, responses to that discovery remain outstanding at the time this testimony was prepared.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. Following this introductory section, my testimony is divided into three additional sections. The first section provides a summary of BGWC's proposed rate changes for water service and presents an overview of water utility cost of service methodologies. Next, I address BGWC's proposed base facility charges for water service. Finally, I discuss BGWC's charges for sewer service and my recommendations concerning potential changes to the design of those charges.

II. WATER SERVICE RATE DESIGN AND COST ALLOCATION

Q. BRIEFLY SUMMARIZE THE RATE CHANGES PROPOSED BY BGWC FOR WATER SERVICE.

A. BGWC provides water service in two service territories—Service Territory 1 and Service Territory 2. BGWC provides service to Water Supply Customers Only and Water Distribution Customers Only in each service territory. Water Supply Customers Only are served with water supplied by wells owned and operated by BGWC, while Water Distribution Customers Only are served with water purchased from a governmental body or agency or other entity for distribution and resale by BGWC. Water Supply Customers Only in each service territory are assessed a monthly base facility charge and a commodity usage charge. For Water Distribution Customers Only in each service territory, BGWC is proposing to assess a monthly base facility charge, a distribution charge, and a purchased water charge. Currently, Water Distribution Customers Only are assessed a volumetric commodity charge which recovers both BGWC's distribution and purchased water costs. Different rates are currently applicable for service in each territory, and more than 98 percent of the customers in each service territory are Residential customers. The rates proposed for Residential customers in each service territory are identified in Table 1. Rates for Commercial customers are included in Schedule A of the Company's Application.

Table 1.
Blue Granite Water Company
Summary of Present and Proposed Residential
Charges for Water Service

SERVICE TERRITORY 1	**Present**	**Proposed**
Water Supply Customers Only		
Base Facility Charge	$14.38	$22.09
Commodity Charge (1,000 gallons)	$5.59	$8.59
Water Distribution Customers Only		
Base Facility Charge	$14.38	$22.00
Distribution Charge	$7.55	$4.75
Purchased Water Charge	--	$6.85
SERVICE TERRITORY 2	**Present**	**Proposed**
Water Supply Customers Only		
Base Facility Charge	$28.59	$38.58
Commodity Charge (1,000 gallons)	$10.27	$13.86
Water Distribution Customers Only		
Base Facility Charge	$28.59	$38.58
Distribution Charge	$11.85	$4.91
Purchased Water Charge	--	$11.08

Q. DID BGWC PRESENT A CLASS COST OF SERVICE STUDY ("CCOSS") TO DETERMINE AND SUPPORT THE CHANGES IN RATES IT IS PROPOSING IN THIS PROCEEDING?

A. No.

Q. EVEN THOUGH BGWC DID NOT PRESENT A CCOSS IN THIS PROCEEDING, WHAT IS THE OBJECTIVE OF A CCOSS?

A. A CCOSS is conducted to assist a utility or commission in determining the level of costs properly recovered from and the charges assessed to each of the various classes to which

the utility provides service. Allocation of recoverable costs to each class of service is generally based on usage and cost causation principles.

Q. WHAT ARE THE PRIMARY COST OF SERVICE STUDY METHODOLOGIES UTILIZED FOR WATER UTILITIES?

A. The two most commonly used and widely recognized methods of allocating costs to customer classes for water utilities are the base-extra capacity method and the commodity-demand method. Both of these methods are set forth in the American Water Works Association's ("AWWA") *Principles of Water Rates, Fees and Charges* ("AWWA M1 Manual").

Q. PLEASE SUMMARIZE EACH OF THESE METHODS.

A. Under the base-extra capacity method, investment and costs are first classified into four primary functional cost categories: base or average capacity, extra capacity, customer, and direct fire protection. Customer costs are commonly further divided between meter and service related and account or bill related costs. Extra capacity costs may also be divided between maximum day and maximum hour costs. Once investment and costs are classified to these functional categories, they are then allocated to customer classes. Base costs are allocated according to average water use, and extra capacity costs are allocated on the basis of the excess of peak demands over average demands. Meter and service-related customer costs are allocated on the basis of relative meter and service investment or a proxy thereof. Account related customer costs are allocated in proportion to the number of customers or the number of bills.

The commodity-demand method follows the same general procedures. However, usage related costs are classified as commodity and demand related rather than as base and extra capacity related. Commodity related costs are allocated to customer classes on the basis of total water use (which is equivalent to average demand), and demand related

costs are allocated on the basis of each class' contribution to peak demand rather than on the basis of class demands in excess of average use.

Q. BASED ON YOUR EXPERIENCE, WHICH AWWA CCOSS METHOD IS MOST COMMONLY USED BY WATER UTILITIES?

A. In my experience, the base-extra capacity CCOSS method is by far the most commonly used AWWA CCOSS method used by water utilities.

III. PROPOSED CHARGES FOR WATER SERVICE

Q. WHAT ARE SOME OF THE PRINCIPLES OF A SOUND RATE DESIGN?

A. A sound revenue allocation and rate design should:

- Utilize class cost of service study results as a guide;
- Provide stability and predictability of the rates themselves, with a minimum of unexpected changes seriously adverse to ratepayers or the utility (gradualism);
- Yield the total revenue requirement;
- Provide for simplicity, certainty, convenience of payment, understandability, public acceptability, and feasibility of application; and
- Reflect fairness in the apportionment of the total cost of service among the various customer classes.[1]

Q. ARE THE CHARGES PROPOSED BY BGWC FOR WATER SERVICE REASONABLE?

A. Based on the revenue increase requested by the Company, the proposed charges are not reasonable.[2] Under the base-extra capacity CCOSS method presented in the AWWA M1

[1] *Principles of Public Utility Rates*, Second Edition, James C. Bonbright, Albert L. Danielsen, David R. Kamerschen; Public Utility Reports, Inc., 1988, pages 383-384.

[2] From a cost of service perspective, in utility rate proceedings, the reasonableness of the rates proposed by a utility are typically evaluated on the basis of the increase requested by the utility. This allows for an apples-to-apples comparison of various cost allocation and rate design proposals. It is not an indication that the revenue increase requested by a utility is reasonable, and my use of BGWC's requested increase should not be interpreted as a finding that the requested increase is reasonable.

Manual, base and extra capacity costs would be recovered through volumetric usage charges and customer-related costs would be recovered through base facility (monthly customer) charges. Had the Company presented a CCOSS utilizing the base-extra capacity method described in the AWWA M1 Manual, the CCOSS would have indicated that cost-based facility charges for BGWC would have been significantly lower than the charges proposed by the Company, and even lower than the existing base facility charges.

Q. HAVE YOU DEVELOPED AN ESTIMATE OF THE APPROPRIATE BASE FACILITY CHARGES FOR WATER SERVICE BASED ON THE AWWA BASE-EXTRA CAPACITY CCOSS METHOD?

A. Yes. An estimate of cost-based base facility charges for BGWC is developed on Exhibit JDM-1. As indicated there, appropriate cost-based base facility charges Residential for water service customers are approximately $10.00 per month. By contrast, BGWC is proposing a base facility charge for Service Territory 1 Residential customers of $22.09, and $38.58 for Residential customers in Service Territory 2.

Q. WHAT DO YOU RECOMMEND CONCERNING BGWC'S BASE FACILITY CHARGES?

A. Because the indicated cost-based base facility charges significantly exceed BGWC's current and proposed base facility charges, I recommend that BGWC's current base facility charges not be increased, and that any increase in revenue authorized by this Commission in this proceeding be recovered through increases in the volumetric commodity and distribution charges.

IV. SEWER SERVICE RATE DESIGN

Q. WHAT ARE YOUR CONCERNS WITH BGWC'S PROPOSED CHARGES FOR SEWER SERVICE?

A. I have two concerns. First, BGWC currently assesses a fixed month charge for sewer service, and BGWC is proposing to continue this rate design. That is, volumetric usage charges are not assessed for sewer service. Assessing volumetric usage charges for sewer service based on water service usage is a common practice of utilities, and may be a better approach for matching cost causation and cost recovery.

Second, the fixed month charge assessed to Commercial customers is based on each customer's SFE. This rate design may not provide for a reasonable matching of cost causation and cost recovery.

Q. WHAT DO YOU RECOMMEND WITH RESPECT TO YOUR TWO CONCERNS?

A. I recommend that in its rebuttal testimony, BGWC address whether it would be reasonable to assess volumetric charges for sewer service based on customer water service usage. I also recommend that in its Rebuttal Testimony, BGWC address whether assessing Commercial customers sewer service charges based on each customer's SFE is reasonable. The Department has submitted discovery to BGWC concerning both of these recommendations; however, responses to that discovery remain outstanding at the time this testimony was prepared.

Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

BLUE GRANITE WATER COMPANY
Calculation of Customer Charge Cost of Service

Rate Base	
Gross Plant In Service	$7,919,340
Accumulated Depreciation	(802,687)
Net Plant In Service	$7,116,653
Deferred Charges	$0
Cash Working Capital	0
Contributions In Aid of Construction	(1,818,215)
Accumulated Deferred Income Taxes	(354,712)
Customer Deposits	(32,852)
Plant Held for Future Use	0
Plant Acquisition Adjustment	(138,549)
Excess Book Value	0
Total	$4,772,325
Return and Taxes	$531,601
Maintenance Expenses	
Salaries and Wages (1)	$310,064
Capitalized Time	0
Purchased Power	0
Purchased Water - Pass Through	0
Maintenance and Repair	181,349
Maintenance Testing	0
Meter Reading	76,523
Chemicals	0
Transportation	23,479
Operating Exp. Charged to Plant	0
Total	$591,415
General Expenses	
Salaries and Wages	$0
Office Supplies & Other Office Exp.	190,276
Regulatory Commission Exp.	13,622
Pension & Other Benefits	76,810
Rent	10,285
Insurance	34,308
Office Utilities	47,288
Outside Services	104,675
Non-Utility Misc Income	43,599
Miscellaneous	6,074
Total	$526,938
Depreciation	$38,571
Amortization of CIAC	(29,058)
Taxes Other Than Income	350,187
Sale of Utility Property	(8,305)
Amort. Investment Tax Credit	(824)
Amortization of PAA	(2,429)
Total	$348,142
Total Operating Expenses	$1,466,494
Total Customer Costs	$1,998,095
Bills	198,945
Customer Charge	$ 10.04

Note:
(1) Includes general expense salaries and wages, capitalized time.